

510(k) SUMMARY  
FOR THE  
OPDIMA

K07/015

April 4, 2007

MAY 10 2007

Siemens Medical Solutions USA, Inc.  
51 Valley Stream Parkway  
Malvern, PA 19355

This 510(k) summary of safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR §807.92.

**1. Contact Person:**

Ms. Kimberly Rendon  
51 Valley Stream Parkway  
Malvern, PA 19355  
Phone: (610) 448-1773  
Fax: (610) 448-1787

**2. Device Name and Classification:**

Trade Name: OPDIMA Digital Mammographic X-ray System  
Classification Name: Mammographic X-Ray System  
Classification Panel: Radiology  
CFR Section: 21 CFR §892.1710  
Device Classification: Class II  
Product Code: 90IZL

**3. Substantial Equivalence:**

The OPDIMA is substantially equivalent to the following device:

<i>Predicate Device Name</i>	<i>510(k) Number</i>	<i>Clearance Date</i>	<i>Comparable Properties</i>
OPDIMA Digital Mammographic X-ray system	K003945	02/02/2001	<ul style="list-style-type: none"><li>• Hardware</li><li>• Control Software</li><li>• Image processing</li><li>• Intended use</li></ul>

#### **4. Device Description:**

OPDIMA is a Small Field Digital Mammography (SFDM) system. It is marketed as an option to the Siemens MAMMOMAT series X-ray examination systems. It provides spot imaging for diagnosis and stereo tactic biopsy. OPDIMA features a small (49 x 85 mm<sup>2</sup>) CCD detector that converts the X-ray attenuation into an electronic pattern. The electronic pattern is read out, processed and displayed at a high resolution monitor. The images may be post processed, printed or transferred via DICOM network for multiple purposes.

#### **5. Intended Use of the Device:**

The Siemens MAMMOMAT series with OPDIMA option is intended for use in small field mammographic X-ray imaging. Such small field imaging is used during stereo tactic biopsy and diagnostic spot localization.

#### **6. Technology Characteristics of the principle Device Compared to the Predicate:**

The OPDIMA functionality and technological characteristics of the system, with the new Windows based workstation imaging characteristics, remain the same. Graphical user interface and performance will be improved to keep pace with the technology leap. The imaging area (49x85mm<sup>2</sup>) remains the same. The maximum resolution (high res mode 2048 x 3584 pixel) with 20 lp/mm and with 13 lp/mm (normal res mode 1024 x 1792 pixel) remains unchanged. Device dependent image processing remains unchanged. Each software module that is reused in the new Windows based workstation is converted to the Windows environment.

#### **7. General Safety and Effectiveness Concerns**

Instructions for use are included within the device labeling and the information provided will enable the trained healthcare professional to operate the device in a safe and effective manner. Furthermore, the operators are health care professionals familiar with and responsible for the X-ray examination to be performed.

#### **8. Substantial Equivalence**

In the opinion of Siemens Medical Solutions USA, Inc., the information provided establishes that OPDIMA with Windows based workstation is substantially equivalent to the commercially available OPDIMA with UNIX workstation.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration  
9200 Corporate Blvd.  
Rockville MD 20850

MAY 10 2007

Ms. Kim Rendon  
Technical Specialist, Regulatory Affairs  
Siemens Medical Solutions USA, Inc.  
51 Valley Stream Pkwy, MS E50  
MALVERN PA 19355

Re: K071015

Trade/Device Name: MAMMOMAT Series with OPDIMA Option

Regulation Number: 21 CFR 892.1710

Regulation Name: Mammographic x-ray system

Regulatory Class: II

Product Code: IZH

Dated: April 4, 2007

Received: April 10, 2007

Dear Ms. Rendon:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.



*Protecting and Promoting Public Health*

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

21 CFR 876.xxx	(Gastroenterology/Renal/Urology)	240-276-0115
21 CFR 884.xxx	(Obstetrics/Gynecology)	240-276-0115
21 CFR 894.xxx	(Radiology)	240-276-0120
Other		240-276-0100

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150

or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Nancy C. Brogdon  
Director, Division of Reproductive,  
Abdominal, and Radiological Devices  
Office of Device Evaluation  
Center for Devices and Radiological Health

Enclosure

## INDICATIONS FOR USE

510(k) Number (if known): K071015

Device Name: OPDIMA

### Indications for Use:

The Siemens MAMMOMAT series with OPDIMA option is intended for use in small field mammographic X-ray imaging. Such small field imaging is used during stereo tactic biopsy and diagnostic spot localization.

Prescription Use ✓ OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (Per 21 CFR 801.109)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of the CDRH, Office of Device Evaluation (ODE)

Nancy C Brogdon  
(Division Sign-Off)  
Division of Reproductive, Abdominal, and  
Radiological Devices  
510(k) Number K071015

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